IEEE P802.11  
Wireless LANs

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | LB232 CR ESP BIS | | | | | | Date: 2018-07-31 | | | | | | Author(s): | | | | | | Name | Affiliation | Address | Phone | email | | Matthew Fischer | Broadcom |  |  | [Matthew.fischer@broadcom.com](mailto:Matthew.fischer@broadcom.com) | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |

Abstract

Comment resolution for some CIDs from WG LB 232 of D1.0 that are related to Estimated Throughput that were not included in 11-17-1192-23.

The CID list is:

1049, 1050, 1051, 1058, 1059, 1069

There are no new proposed changes for the TGax draft included in the proposed resolutions for these comments. The proposed resolutions in this document rely on some of the changes to the TGax D1.2 draft that were described in 11-17-1192r23 and which were already approved by the task group for execution by the editor to resolve other CIDs. The particular changes from 11-17-1192r23 that are deemed to resolve the CIDs in this document are shown in this document for reference only.

**REVISION NOTES:**

**R0**:

Initial

**END OF REVISION NOTES**

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGax Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGmd Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGmd Editor: Editing instructions preceded by “TGmd Editor” are instructions to the TGmd editor to modify existing material in the TGmd draft. As a result of adopting the changes, the TGmd editor will execute the instructions rather than copy them to the TGmd Draft.***

**CIDs**

The following are some LB232 CIDs related to the Estimated Throughput (ESTT) SAP:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1049 | Shahrnaz Azizi | 648.02 | 6.3.102.2.2 | It lists "TheAverageMSDUSizeOutbound, AverageMSDUSizeInbound".  However, Outbound and Inbound are not defined. | To prepare for future inclusion of 11ax, use uplink & downlink instead of Outbound and Inbound, and define them before listing the  primitive parameters | Revise – TGmd editor to make changes as shown in 11-17/1192r23 for D1.2 subclause 6.3.102.2.2 and 6.3.102.3.2 which modify the wording of the use of the terms cited by the commentor while noting that the entries in the column with the lable “Description” do in fact, provide a definition of the cited parameters. The terms are not changed to uplink and downlink, as the primitive might still be used for cases when there is ambiguity in the meaning of the directions up and down. |
| 1050 | Shahrnaz Azizi | 649.07 | 6.3.102.3.2 | Similar to subclause 6.3.102.2.2, this lists "EstimatedThroughputOutbound, EstimatedThroughputInbound". However, Outbound and Inbound are not defined. | To prepare for future inclusion of 11ax, use uplink & downlink instead of Outbound and Inbound, and define them before listing the primitive parameters. | Revise – TGmd editor to make changes as shown in 11-17/1192r23 for D1.2 subclause 6.3.102.2.2 and 6.3.102.3.2 which modify the wording of the use of the terms cited by the commentor while noting that the entries in the column with the lable “Description” do in fact, provide a definition of the cited parameters. The terms are not changed to uplink and downlink, as the primitive might still be used for cases when there is ambiguity in the meaning of the directions up and down. |
| 1051 | Shahrnaz Azizi | 648.02 | 6.3.102.2.2 | It lists "TheAverageMSDUSizeOutbound,  AverageMSDUSizeInbound". However, Outbound and Inbound are not defined. | To prepare for future inclusion of 11ax, use uplink & downlink instead of Outbound and Inbound, and define them before listing the primitive parameters. | Revise – TGmd editor to make changes as shown in 11-17/1192r23 for D1.2 subclause 6.3.102.2.2 and 6.3.102.3.2 which modify the wording of the use of the terms cited by the commentor while noting that the entries in the column with the lable “Description” do in fact, provide a definition of the cited parameters. The terms are not changed to uplink and downlink, as the primitive might still be used for cases when there is ambiguity in the meaning of the directions up and down. |
| 1058 | Emily Qi | 649.19 | 6.3.102.3.2 | It states "The estimated throughput in the direction from the STA corresponding to the PeerMACAddress to this STA with" . It seems to me that this description is for "EstimatedThoughputInbound", not for "EstimatedThroughputOutbound". | at 649.19, change "EstimatedThroughputOutbound" to "EstimatedThroughputInbound". | Revise – TGmd editor to make changes as shown in 11-17/1192r23 for D1.2 subclause 6.3.102.2.2 and 6.3.102.3.2 which modify the wording to make a correction similar to the one suggested by the commenter. |
| 1059 | Emily Qi | 649.28 | 6.3.102.3.2 | It states "The estimated throughput in the  direction from this STA to the STA  corresponding to the  PeerMACAddress" . It seems to me that this description is for EstimatedThroughputOutbound not for EstimatedThroughputInbound. | at 649.28, change "EstimatedThroughputInbound" to "EstimatedThroughputOutbound". | Revise – TGmd editor to make changes as shown in 11-17/1192r23 for D1.2 subclause 6.3.102.2.2 and 6.3.102.3.2 which modify the wording to make a correction similar to the one suggested by the commenter. |
| 1060 | Emily Qi | 649.00 | 6.3.102.3.2 | "Inbound" and "Outbound" are confusing. Particularly, it is used when AP (peer STA) provides some Estimated Service parameters for estimating the STA's inbound/outbound throughput. Is there a better term for the replacement? | Uplink or Downlink might be an option ? | Revise – TGmd editor to make changes as shown in 11-17/1192r23 for D1.2 subclause 6.3.102.2.2 and 6.3.102.3.2 which modify the wording to make a correction similar to the one suggested by the commenter. The terms are not changed to uplink and downlink, as the primitive might still be used for cases when there is ambiguity in the meaning of the directions up and down. |

**Discussion:**

See comments within the proposed resolutions.

**Review of Existing Changes to Draft D1.2 That Have already been adopted from 11-17-1192r23:**

Herein is a review of the applicable cited text and the changes from D1.2 to D1.3 that were effected to that text per the editing instructions indicated within 11-17-1192r23:

**6.3.101.2.2 Semantics of the service primitive**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid Range** | **Description** |
| PeerSTAAddress | MAC Address | Any valid individual MACAddress | Specifies the MAC address of the STA for which throughput is to be estimated assuming an association to that STA if an association with that STA does not currently exist. |
| AverageMSDUSizeInbound | An ordered set of integers | –1 to 7920, for each member of the set | A set of integers providing an estimate of the average number of octets per MSDU expected to be delivered over the wireless medium to this STA by the STA corresponding to the PeerMACAddress to this STA, specified per access category in the order AC\_VO, AC\_VI, AC\_BE, AC\_BK. A value of –1 means that the size is unspecified, a value of 0 means that no MSDUs are expected to be delivered for this access category. |
| AverageMSDUSizeOutbound | An ordered set of integers | –1 to 7920, for each member of the set | A set of integers providing an estimate of the average number of octets per MSDU expected to be delivered over the wireless medium by this STA to the STA corresponding to the PeerMACAddress, specified per access category in the order AC\_VO, AC\_VI, AC\_BE, AC\_BK. A value of –1 means that the size is unspecified, a value of 0 means that no MSDUs are expected to be delivered for this access category. |

**6.3.101.3.2 Semantics of the service primitive**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid Range** | **Description** |
| PeerSTAAddress | MAC Address | Any valid individual MACAddress | Specifies the MAC address of the STA for which throughput is to be estimated assuming a link with that STA if a link with that STA does not currently exist. |
| EstimatedThroughputOutbound | An ordered set of Real numbers | Non-negative real numbers | The estimated throughput in the direction from this STA to the STA corresponding to the PeerMACAddress with units of MSDU bits per second, specified per access category in the order AC\_VO, AC\_VI, AC\_BE, AC\_BK. A value of 0 means no estimate is available. |
| EstimatedThroughputInbound | An ordered set of Real numbers | Non-negative real numbers | The estimated throughput in the direction from the STA corresponding to the PeerMACAddress to this STA with units of MSDU bits per second, specified per access category in the order AC\_VO, AC\_VI, AC\_BE, AC\_BK. A value of 0 means no estimate is available. |